

CLAIMS:

1. Public service system comprising:
 - automatic request recognition means, capable of automatically recognizing a user request;
 - automatic user identification means, capable of automatically identifying the requesting user;
 - 5 - automatic authorization means, capable of automatically checking a user's authorisation;
 - a wireless communication network (110) having a plurality of communication nodes (111, 112, 113, 114) capable of direct or indirect communication with each other;
 - 10 - a central controller (120; 220) associated with at least one of said communication nodes;
 - and request receiving means associated with at least one of said communication nodes.
- 15 2. Public service system according to claim 1, the central controller (120; 220) allowing or rejecting the user's request on the basis of the authorization means.
3. Public service system according to claim 2, further comprising controllable switch means controlled by said controller for selectively providing or not-providing the requested service.
- 20 4. Public service system according to claim 2, the central controller (120; 220) being designed to generate an alarm signal if it finds that a non-authorised user is enjoying the service.
- 25 5. Public service system according to claim 2, the central controller (120; 220) being designed to automatically take care of financial administration when the service is terminated.

6. Public service system according to claim 1, further comprising controllable service provision means associated with at least one of said communication nodes.

7. Public service system according to claim 1, implemented as a parking system
5 (1000), wherein the request receiving means comprise a camera (130) with associated image processing software, capable of recognising that a vehicle (A) is entering or leaving a parking place (11).

8. Public parking system according to claim 7, wherein the image processing
10 software is capable of reading a registration number of the vehicle.

9. Public parking system according to claim 8, further comprising a memory (122) having a data base of authorised registration numbers stored therein.

10. Public service system according to claim 1, implemented as a parking system
15 (1000), further comprising machine-readable identification means adapted to be fixed to a vehicle, and reading devices associated with the parking places, the reading devices being coupled for communication with at least one of the communication nodes.

11. Public service system according to claim 1, implemented as a parking system
20 (1000), further comprising a transmitter (140) adapted to be fixed to a vehicle, and capable of data communication (D) with at least one of the communication nodes.

12. Public parking system according to claim 11, wherein said transmitter is
25 arranged to continuously or regularly transmit a signal containing identification information.

13. Public parking system according to claim 12, the system being designed to automatically derive a vehicle's position from the signal transmitted by said transmitter.

14. Public parking system according to claim 13, wherein said transmitter is
30 arranged to include time information into the transmitted signal, wherein the communication nodes comprise timing means, and wherein the system is designed to calculate the vehicle's position on the basis of propagation time from the transmitter to the respective communication nodes.

15. Public parking system according to claim 14, wherein said transmitter and said communication nodes each comprise GPS receiving means, adapted to derive time information from received GPS signals.

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16. Public parking system according to claim 13, wherein said transmitter is arranged to include position information into the transmitted signal.

17. Public parking system according to claim 16, wherein said transmitter
10 comprises GPS receiving means, adapted to derive position information from received GPS signals.

18. Public service system according to claim 1, implemented as a parking system (1000), further comprising a controllable gate (12) at the entrance of a parking place (11a),
15 controlled by a controller allowing or rejecting the user's request on the basis of the authorization means.

19. Public service system according to claim 1, implemented as a power provision system (2000), further comprising:
20 - energy transfer means (300) controlled by said controller;
- energy receiving means (302) adapted to be coupled to a user apparatus.

20. Public power provision system according to claim 19, wherein the energy transfer means comprise a power outlet (301) and wherein the energy receiving means (302)
25 comprise a connector.

21. Public power provision system according to claim 20, wherein the connector comprises user ID information, and wherein the power outlet (301) comprises ID reading means.

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22. Public power provision system according to claim 19, wherein the energy transfer means and the energy receiving means are adapted for wireless energy transfer.

23. Public power provision system according to claim 22, wherein the energy transfer means comprise a light source and wherein the energy receiving means comprise a photodetector.
- 5 24. Public power provision system according to claim 22, wherein the energy transfer means comprise an electromagnetic wave emitting antenna or antenna array, and wherein the energy receiving means comprise an electromagnetic wave receiving antenna, preferably incorporating rectenna technologies with one or more rectifiers.
- 10 25. Public power provision system according to claim 22, wherein the energy transfer means are capable of generating a beam of energy and directing this beam to the energy receiving means.
- 15 26. Public power provision system according to claim 25, further comprising a transmitter (311) adapted to be associated with a user apparatus, capable of transmitting a signal containing user location information, wherein the communication nodes comprise receiving means capable of receiving the said signal and capable of deriving the user location information from the received signal; and wherein the energy transfer means are capable of directing a beam of energy to the location as derived from said received signal.
- 20 27. Public power provision system according to claim 19, further comprising a transmitter (311) adapted to be associated with a user apparatus, capable of transmitting a signal containing user ID information, wherein the communication nodes comprise receiving means capable of receiving the said signal and capable of deriving the user ID information from the received signal.
- 25 28. Public power provision system according to claim 19, further comprising a measuring device (304) capable of measuring the amount of power provided or time duration of the power provided.
- 30 29. System according to claim 1, wherein at least some of the nodes are associated with street lighting armatures or lamp posts.

30. System according to claim 1, wherein at least some of the nodes are designed for communication with each other over optical links.